

CLAIMS:

1. A die bonding method for successively bonding chips to a plurality of chip-mount portions disposed on a substrate, said method including:

a bonding step that bonds a chip to a chip-mount portion by a bonding head;

a bonding preparation step that moves said bonding head to a chip supplying portion to pick up a new chip and then moves said new chip to said chip-mount portion where a next bonding operation is performed;

an imaging step which is performed in parallel with said bonding preparation step, said imaging step imaging a chip-mount portion for inspection, which is a chip-mount portion where bonding has just been performed, and a chip-mount portion for position-detection, which is a chip-mount portion where bonding is going to be performed, and said imaging step being performed by an imaging device in which said chip-mount portions are contained in same visual field thereof;

a position detection step that detects a position of said chip-mount portion for position-detection based on acquired image data; and

an inspection step that inspects a state of bonding of said chip-mount portion for inspection based on acquired image data.

2. The die bonding method according to Claim 1, wherein said chip-mount portion for position-detection is a chip-mount portion where bonding is to be performed next.

3. The die bonding method according to Claim 1, wherein said chip-mount portion for position-detection is a chip-mount portion where bonding is to be performed after bonding is to be performed next.

4. A die bonding apparatus in which chips are successively bonded to a plurality of chip-mount portions disposed on a substrate, said apparatus comprising:

a bonding means for bonding chips to chip-mount portions using a bonding head;

a moving means for moving said bonding head to a chip supplying portion so as to cause said bonding head to pick up a new chip and then moves said bonding head to a chip-mount portion where bonding is to be performed next;

an imaging means for imaging, while said bonding head is moving, a chip-mount portion for inspection where bonding has just been performed and a chip-mount portion for position-detection where bonding is going to be performed, said imaging means performs imaging with said chip-mount portions being contained in same visual field thereof;

an inspection means for inspecting a state of bonding of said chip-mount portion for inspection based on acquired image data; and

a position detection means for detecting a position of said chip-mount portion for position-detection based on acquired image data.